QUALITY ASSESSMENT TOOL

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Appendix to Prospero registration of:
The relation between avoidant personality characteristics and fear generalization in healthy subjects: a meta-analytic review. Anna Steenmeijer, Milou Sep, Mitzy Kennis, 2018

This quality assessment (QA) tool is developed based on other meta-analyses (Lissek et al, 2005; Duits et al, 2015) where no preexisting QA tool was used. In addition to risk of bias assessment, this tool includes items to assess various aspects of fear conditioning/generalization paradigms and avoidant personality measures (for eligibility assessment and planned subgroup analyses). The first items are following the GRADE quality assessment guidelines for observational studies. All information is extracted and put into comprehensive meta-analysis for analysis.

Selection bias

1) **Was the sample generalizable or not?**

0 = No (e.g. female psychology students)
1 = Somewhat (e.g. recruited from university campus/community etc)
2 = Yes (e.g. Both sexes, large age range, from community etc)

Participant drop-out

2) **Were the drop-outs described sufficiently?**

0 = No description
1 = Described adequately
2 = No dropouts

Quality of measurements

*When multiple, include ALL data

3) **Avoidant personality (i.e. neuroticism, trait anxiety, behavioural inhibition) measure(s):**

0 = Non validated
1 = Validated, extract data:
- STAI-T
- EPQ
- NEO-FFI
- BIS
- Other, namely:

4) **Fear acquisition scores:**

0 = The manipulation (fear conditioning) was reported and unscussesful (i.e. participants did not show fear conditioning)
1 = the manipulation was not checked / not reported / success of the manipulation was unclear
2 = Fear acquisition was reported and successful, but not taken into account to fear generalization (e.g. as covariate in analysis)
3 = Fear conditioning present in sample, not conditioned participants were excluded / measures of fear acquisition were used as covar in analyses of fear generalization

Fear conditioning – generalization paradigm
Only include paradigms where threat is inescapable during fear acquisition.

Measures for subgroup analyses

5) Sample size:
6) Gender:
7) Mean Age / Age range:
8) Fear measure(s) applied to assess generalization:
   a) Self – report ratings, extract data:
      - UCS Expectancy
      - CS Fear
      *Specify if:
      Taken continuously (e.g. after each trial) or once (e.g. after completion of experiment).
   b) Physiological measures, extract data:
      - Fear potentiated startle response (FPS) – Electromyographic recording (EMG)
      - Skin conductance response
      - Amygdala response using fMRI
      - Heart rate
      - Other, namely:
      *Specify if:
      Taken continuously (e.g. after each trial) or once (e.g. after completion of experiment).
9) Type of UCS:
   - Electrical shock
   - Aversive noise (Scream)
   - Odor
   - Unpleasant/fearful picture
   - Painful pressure
   - Airpuff
   - Other, namely:
10) **Type of CS+ (Danger cue):**

Contextual FC:

- Virtual environment (room)
- Other, namely:

Cued FC:

- Color
- Geometrical shape(s)
- Human face
- Word
- Picture
- Other, namely:

11) **Type of CS- (Safety cue):**

Contextual FC:

- (Neutral) Virtual environment (room)
- Other, namely:

Cued FC:

- Color
- Geometrical shape(s)
- Human face (Neutral expression)
- (Neutral) Word
- (Neutral) Picture
- Other, namely:

12) **How was fear generalization measured?**

- Fear response towards new cue (specify stimulus type, see Q10 & Q11)
- Fear response towards new context (specify stimulus type, see Q10 & Q11)
- Fear response towards safety cue (specify stimulus type, see Q10 & Q11)
- Fear response towards safety context (specify stimulus type, see Q10 & Q11)
- Other, namely:

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